

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A solid electrolytic capacitor, comprising:
a substrate composed of a porous sinter of niobium particles;
a niobium nitride layer formed on the surface of said niobium particles ~~substrate~~; and
a dielectric layer composed of niobium oxide formed on the surface of said niobium nitride layer.
2. (Original) The solid electrolytic capacitor according to claim 1, wherein
said substrate and said niobium nitride layer constitute an anode.
3. (Original) The solid electrolytic capacitor according to claim 1, wherein said
dielectric layer is nitrogen-free.
4. (Original) The solid electrolytic capacitor according to claim 1, wherein
said niobium nitride layer is substantially composed of Nb₂N.
5. (Original) The solid electrolytic capacitor according to claim 1, wherein the
nitrogen content based on the total weight of said substrate, said niobium nitride, and said dielectric
layer is not less than 0.001 % by weight nor more than 0.2 % by weight.
6. (Original) The solid electrolytic capacitor according to claim 1, wherein
the nitrogen content based on the total weight of said substrate, said niobium nitride, and
said dielectric layer is not less than 0.001 % by weight nor more than 0.08 % by weight.
7. (Currently Amended) A solid electrolytic capacitor, comprising: an anode composed
of niobium nitride; and
a dielectric layer composed of niobium oxide formed on the surface of said anode, wherein
said niobium nitride is composed of NbN_x, where said X is not less than 0.05 nor more than
0.75.
8. (Cancelled)

9. (Cancelled)
10. (Original) The solid electrolytic capacitor according to claim 7, wherein
said anode is composed of a mixture of a plurality of kinds of niobium nitride containing
nitrogen in different composition ratios.
11. (Withdrawn) A method of manufacturing a solid electrolytic capacitor, comprising
the steps of:
forming a dielectric layer composed of niobium oxide by oxidizing a surface of a substrate
composed of niobium;
forming a niobium nitride layer between said substrate and said dielectric layer by thermally
treating said substrate having said dielectric layer formed thereon in a nitrogen atmosphere; and
anodizing said dielectric layer..
12. (Withdrawn) The method of manufacturing a solid electrolytic capacitor according
to claim 11, wherein
the temperature in said thermal treatment is not lower than 300°C nor higher than 920°C.
13. (Withdrawn) The method of manufacturing a solid electrolytic capacitor according
to claim 11, wherein
the temperature in said thermal treatment is not lower than 300°C nor higher than 800°C..
14. (Withdrawn) A method of manufacturing a solid electrolytic capacitor comprising
the step of forming a dielectric layer composed of niobium oxide on the surface of an anode
composed of niobium nitride by oxidizing a surface of said anode.
15. (New) A solid electrolytic capacitor, comprising:
an anode including a substrate composed of niobium and a niobium nitride layer formed on
the surface of said substrate; and

a dielectric layer composed of niobium oxide formed on the surface of said niobium nitride layer.

16. (New) A solid electrolytic capacitor, comprising:

a substrate composed of niobium;

a niobium nitride layer formed to solidly cover the surface of said substrate without producing any clearance; and

a dielectric layer composed of niobium oxide formed on the surface of said niobium nitride layer.